

REMARKS

Claims 1-17 are pending in the above-identified application and were rejected. With this Amendment, claims 1 and 5 have been amended, and claims 11-17 have been cancelled. Accordingly, claims 1-10 are at issue.

I. 35 U.S.C. § 103 Obviousness Rejection of Claims

Claims 1, 5, 9, 10, 15, and 16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamada et al.* (U.S. Publication No. 2001/0050717) in view of *Miyaguchi et al.* (U.S. Patent No. 5,508,740). Claims 2, 3, 6, and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Yamada et al.* (U.S. Publication No. 2001/0050717) in view of *Miyaguchi et al.* (U.S. Patent No. 5,508,740) and further in view of *Ackland et al.* (Non-Patent Literature). Claims 4 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamada et al.* (U.S. Publication No. 2001/0050717) in view of *Miyaguchi et al.* (U.S. Patent No. 5,508,740) and further in view of *Tullis* (U.S. Patent No. 6,535,243). Claims 12 and 13 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Tamura et al.* (U.S. Patent No. 5,130,804) in view of *Ackland et al.* (Not-Patent Literature). Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Tamura et al.* (U.S. Patent No. 5,130,804) in view of *Tullis* (U.S. Patent No. 6,535,243). Applicants respectfully traverse these rejections.

Independent claims 1 and 5 have been amended to recite that the circuit board has substantially flat surfaces, and that the chip of the solid-state image pickup element with a light-receiving surface is disposed on a surface of the sensor package. *Yamada et al.* discloses a CMOS camera system with a stepped wiring board 21, which is connected to a flexible wiring board 5 connected to other components. (page 2, ¶ 41; Figs. 1-10.) This configuration—using a stepped wiring board in conjunction with a flexible wiring board—results in a significantly

thicker device than what is disclosed by the Applicants, who specifically provide that one of the purposes of the claimed invention is to reduce the size of electronic devices that incorporate solid-state image pickup devices by reducing the thickness of the solid-state image pickup device. Claims 1 and 5 have been amended to recite that the circuit board has substantially flat surfaces, and so the stepped wiring board configuration in *Yamada et al.*, which results in a larger device, does not disclose this feature. Furthermore, the embodiments of *Yamada et al.* that seem to use only the flexible wiring board 5 (Figs. 11-15) significantly differ from the claimed invention because there is no sensor package, seal in the opening, and the pickup element is not disposed within the sensor package. Rather, these embodiments use insulating sealing resins 43, 44 to seal the image pickup semiconductor 4, and the image pickup semiconductor 4 is electrically connected to the flexible wiring board 5 via the electrodes 27. In this respect, *Yamada et al.* teaches away from the teachings of *Miyaguchi et al.* since the insulating resins surround the underside of the image pickup semiconductor.

Besides there not being a sufficient motivation to combine *Yamada et al.* and *Miyaguchi et al.*, *Miyaguchi et al.* does not disclose a sensor package as claimed. The package in *Miyaguchi et al.* has a package main body 210, a buffer member 260, and a light receiving glass plate 250. (col. 3, lines 66-67.) Unlike claims 1 and 5, the image sensor chip 310 is not disposed on a surface of the package. Rather, the image sensor chip 310 in *Miyaguchi et al.* is disposed on a cooling element, which is disposed on a heat radiation member, both of which are explicitly not part of the package. Moreover, *Miyaguchi et al.* does not disclose a seal adhered to the sensor package, as recited in claim 1. Rather, *Miyaguchi et al.* discloses a seal 250 that is connected to a frame 260 that is connected to the ends of the package body 210. Thus, neither *Yamada et al.*

nor *Miyaguchi et al.*, alone or in combination, disclose or suggest all of the elements of claims 1 and 5, and therefore would not render the claims obvious.

Ackland et al. and *Tullis* also still fail to disclose or suggest this claimed subject matter. Thus, none of the cited references, taken singly or in combination, teach or suggest claims 1 and 5.

Claims 2-4 and 9 depend from claim 1, and claims 6-8 and 10 from claim 5. Accordingly, Applicants respectfully request withdrawal of this rejection.

II. 35 U.S.C. § 102 Anticipation Rejection of Claims

Claims 11 and 17 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Tamura et al.* (U.S. Patent No. 5,130,804). Without prejudice, Applicants have cancelled claims 11-17 in order to further prosecution. Applicants reserve the right to claim the subject matter of the claims later in prosecution or in a continuation application.

III. Conclusion

In view of the above amendments and remarks, Applicants submit that all claims are clearly allowable over the cited prior art, and respectfully request early and favorable notification to that effect.

Respectfully submitted,

Dated: July 23, 2007

By: /Christopher P. Rauch/
Christopher P. Rauch
Registration No. 45,034
SONNENSCHNEIN NATH & ROSENTHAL LLP
P.O. Box 061080
Wacker Drive Station, Sears Tower
Chicago, Illinois 60606-1080
(312) 876-8000